

PATENT
USSN 09/750,990
674509-2028

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Jørn Borch SØE
U.S. Serial No. : 09/750,990
Filing Date : December 28, 2000
For : FOODSTUFF
Examiner : Keith D. Hendricks
Art Unit : 1761

745 Fifth Avenue, New York, NY 10151
EXPEDITED PROCEDURE
RESPONSE AFTER FINAL ACTION
UNDER 37 C.F.R. §1.116

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I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Thomas J. Kowalski, Reg. No. 32,147
Type or print name of person signing certification

Thomas J. Kowalski
Signature

22 Jan 03
Date of Signature

DECLARATION OF MICHELSEN ET AL.

Commissioner for Patents
Washington, D.C. 20231
Dear Sir:

We Birgit Michelsen, Ronald Peter De Vries, Jacob Visser, Jørn Borch Sørensen, Charlotte Horsmans Poulsen, and Masoud R. Zargahi declare and state that:

1. *Declarants Are Inventor Herein And Inventors On USP 6,143,543.*

We are the named inventors on U.S. Patent No. 6,143,543, assigned to Danisco A/S. It is also mentioned Jørn Borch Sørensen, a co-inventor on U.S. Patent No. 6,143,543, is the named inventor on the above-captioned patent application ("the present application"), which is also assigned to Danisco A/S.

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2. ***Declarants Are Advised USP 6,143,543 Is Cited And As To Sections 102(e) & 103(c).***

We are advised, and therefore believe, that in the present application, the Examiner has cited U.S. Patent No. 6,143,543 under 35 U.S.C. §102(e). We are advised that the Examiner in the present application relies upon the term "glyceride oligomers" in U.S. Patent No. 6,143,543 in making this rejection. We are also advised that 35 U.S.C. §102(e) provides that a person shall be entitled to a patent unless the invention was described in a patent granted on an application for patent "by another" filed in the United States before the invention by the applicant for patent. We are also advised that 35 U.S.C. §103(c) provides that "[s]ubject matter developed by another person, which qualifies as prior art under one or more of subsections (e), (f), and (g) of section 102 ... shall not preclude patentability ... where the subject matter and the claimed invention, were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." And, we are advised and therefore believe that by a concurrently-filed Amendment After Final Action, the claims of the present application are being amended to be as set forth or as substantially set forth in the Appendix below, following our signatures. Therefore, we respectfully submit, based on our education, training, and experience, including experience as patentees on U.S. Patent No. 6,143,543 and as the named inventor on the present application, that we are qualified to comment on the claims of the present application, especially as to whether the subject matter thereof is disclosed or suggested by U.S. Patent No. 6,143,543.

3. ***Declarants State "Glyceride Oligomers" In USP 6,143,543 Is Typographical Error.***

We, the inventors on U.S. Patent No. 6,143,543, and the inventor on the instant application, respectfully submit that the reliance on "glyceride oligomers" in U.S. Patent No. 6,143,543 is misplaced, such that U.S. Patent No. 6,143,543, or any corresponding foreign equivalent thereto, fails to teach or suggest the invention of the present application. More specifically, while U.S. Patent No. 6,143,543 may mention "glyceride oligomers", this is not a term that is meaningful to one skilled in the art in the context of the disclosure of U.S. Patent No. 6,143,543. In particular, it is respectfully submitted that the skilled artisan would recognize that this term had arisen from a typographical error, and would have assumed that the correct term was "glucoside oligomers," since U.S. Patent No. 6,143,543 relates to sugar oligomers. That is, we, the inventors on U.S. Patent No. 6,143,543, and the inventor on the instant application, are explicitly stating that the term "glyceride oligomers" in U.S. Patent No. 6,143,543 is an obvious

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typographical error; the skilled artisan would have clearly recognized that the term should have been "glucoside oligomers". We further understand that a Request for Certificate of Correction as to U.S. Patent No. 6,143,543 to correct the error in the recitation of "glyceride oligomers", i.e., change "glyceride oligomers" to -- glucoside oligomers --, is being prepared and filed. That typographical error arose by inadvertence, without any deceptive intent. Indeed, in this regard, please note that English is not our first language, and that we missed this inadvertent typographical error during our reading of the application that matured into 6,143,543. Furthermore, U.S. Patent No. 6,143,543 does not teach or suggest the generation of an emulsifier, and the foodstuff of U.S. Patent No. 6,143,543 does not comprise fatty acid esters, as in the invention of the present claims. Accordingly, we respectfully submit that the reliance on "glyceride oligomers" in U.S. Patent No. 6,143,543 is misplaced, and that U.S. Patent No. 6,143,543, or any corresponding foreign equivalent thereto, fails to teach or suggest the invention of the present application.

4. *Inventor Herein Is Not "Another" As To Inventors On USP 6,143,543 And Vice Versa.*

We, the inventors on U.S. Patent No. 6,143,543, and the inventor on the instant application, are not "another" as to each other, such that U.S. Patent No. 6,143,543 is not available as a reference under 35 U.S.C. §102(e) against the present application, as U.S. Patent No. 6,143,543 is not "by another" as to the present application. More specifically, we Birgit Michelsen, Ronald Peter De Vries, Jacob Visser, Jørn Borch Sørensen, Charlotte Horsmans Poulsen, and Masoud R. Zargahi are the named inventors on U.S. Patent No. 6,143,543, assigned to Danisco A/S and, co-inventor Jørn Borch Sørensen on U.S. Patent No. 6,143,543, is the named inventor on the the present application, which is also assigned to Danisco A/S. We are particularly stating that Jørn Borch Sørensen is not "another" as to Birgit Michelsen, Ronald Peter De Vries, Jacob Visser, Jørn Borch Sørensen, Charlotte Horsmans Poulsen, and Masoud R. Zargahi. We are also particularly stating that Birgit Michelsen, Ronald Peter De Vries, Jacob Visser, Jørn Borch Sørensen, Charlotte Horsmans Poulsen, and Masoud R. Zargahi is not "another" as to Jørn Borch Sørensen. Subject matter of U.S. Patent No. 6,143,543 relied upon by the Examiner in the present application was invented by Jørn Borch Sørensen, the inventor on the present application. Accordingly, U.S. Patent No. 6,143,543 is not "by another" and is thus not available against the present application under 35 U.S.C. §102(e).

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5. Assignee Herein Is Same As Assignee On USP 6,143,543.

The subject matter of the present application and the claimed invention of U.S. Patent No. 6,143,543, at the time the inventions were made, are and were owned by the same person, Danisco A/S, and we, the inventors on U.S. Patent No. 6,143,543, and the inventor on the instant application, as to the claimed invention of U.S. Patent No. 6,143,543 and the subject matter of the present application, were, at the times these inventions were made, under an obligation to assign them to the same person, Danisco A/S. Accordingly, even if U.S. Patent No. 6,143,543 was available against the present application under 35 U.S.C. §102(e), it cannot preclude the patentability of the claims of the present application, pursuant to 35 U.S.C. §103(e).

6. USP 6,143,543: Does Not Teach Or Suggest Present Invention, And Not Available.

In view of the foregoing, it is respectfully submitted that U.S. Patent No. 6,143,543 fails to teach or suggest the instant invention, and is not available against the present application.

We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

Dated: 1/11/03

By: Birgit Michelsen

Dated: _____ By: Ronald Peter De Vries

Dated: _____ By: Jacob Visser

Dated: _____ By: Joru Borch Sae

Dated: _____ By: Charlotte Horsmaus Poulsen

Dated: _____ By: Masoud R. Zargahi

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5. *Assignee Herein Is Same As Assignee On USP 6,143,543.*

The subject matter of the present application and the claimed invention of U.S. Patent No. 6,143,543, at the time the inventions were made, are and were owned by the same person, Danisco A/S, and we, the inventors on U.S. Patent No. 6,143,543, and the inventor on the instant application, as to the claimed invention of U.S. Patent No. 6,143,543 and the subject matter of the present application, were, at the times these inventions were made, under an obligation to assign them to the same person, Danisco A/S. Accordingly, even if U.S. Patent No. 6,143,543 was available against the present application under 35 U.S.C. §102(e), it cannot preclude the patentability of the claims of the present application, pursuant to 35 U.S.C. §103(c).

6. *USP 6,143,543; Does Not Teach Or Suggest Present Invention, And Not Available.*

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Dated: _____ By: Birgit Michelsen

Dated: 15-1-2003 By: Ronald Peter De Vries

Dated: _____ By: Jacob Visser

Dated: _____ By: Jorn Borch Sore

Dated: _____ By: Charlotte Horacians Poulsen

Dated: _____ By: Masoud R. Zargahi

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5. *Assignee Herein Is Same As Assignee On USP 6,143,543.*

The subject matter of the present application and the claimed invention of U.S. Patent No. 6,143,543, at the time the inventions were made, are and were owned by the same person, Danisco A/S, and we, the inventors on U.S. Patent No. 6,143,543, and the inventor on the instant application, as to the claimed invention of U.S. Patent No. 6,143,543 and the subject matter of the present application, were, at the times these inventions were made, under an obligation to assign them to the same person, Danisco A/S. Accordingly, even if U.S. Patent No. 6,143,543 was available against the present application under 35 U.S.C. §102(c), it cannot preclude the patentability of the claims of the present application, pursuant to 35 U.S.C. §103(c).

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Dated: _____ By: Birgit Michelsen

Dated: _____ By: Ronald Peter De Vries

Dated: 15-01-2003 By: Jacob Vissen

Dated: _____ By: Jana Berch See

Dated: _____ By: Charlotte Høraasens Poulsen

Dated: _____ By: Masoud R. Zargahi

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5. *Assignee Herein Is Same As Assignee On USP 6,143,543.*

The subject matter of the present application and the claimed invention of U.S. Patent No. 6,143,543, at the time the inventions were made, are and were owned by the same person, Danisco A/S, and we, the inventors on U.S. Patent No. 6,143,543, and the inventor on the instant application, as to the claimed invention of U.S. Patent No. 6,143,543 and the subject matter of the present application, were, at the times these inventions were made, under an obligation to assign them to the same person, Danisco A/S. Accordingly, even if U.S. Patent No. 6,143,543 was available against the present application under 35 U.S.C. §102(e), it cannot preclude the patentability of the claims of the present application, pursuant to 35 U.S.C. §103(e).

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Dated: _____ By: Birgit Michelsen

Dated: _____ By: Ronald Peter De Vries

Dated: _____ By: Jacob Visser

Dated: 10 January 2003 By: Jorn Borch Sae

Dated: _____ By: Charlotte Horsmann Poulsen

Dated: _____ By: Masoud R. Zargahi

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Dated: _____ By: Birgit Michelsen

Dated: _____ By: Ronald Peter De Vries

Dated: _____ By: Jacob Visser

Dated: _____ By: Jorn Berch See

Dated: 10 January 2003 By: Charlotte Horsmans Poulsen

Dated: _____ By: Masoud R. Zargahi

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5. *Assignee Herein Is Same As Assignee On USP 6,143,543.*

The subject matter of the present application and the claimed invention of U.S. Patent No. 6,143,543, at the time the inventions were made, are and were owned by the same person, Danisco A/S, and we, the inventors on U.S. Patent No. 6,143,543, and the inventor on the instant application, as to the claimed invention of U.S. Patent No. 6,143,543 and the subject matter of the present application, were, at the times these inventions were made, under an obligation to assign them to the same person, Danisco A/S. Accordingly, even if U.S. Patent No. 6,143,543 was available against the present application under 35 U.S.C. §102(e), it cannot preclude the patentability of the claims of the present application, pursuant to 35 U.S.C. §103(e).

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Dated: _____ By: _____
Birgit Michelsen

Dated: _____ By: _____
Ronald Peter De Vries

Dated: _____ By: _____
Jacob Visser

Dated: _____ By: _____
Jorn Borch Sae

Dated: _____ By: _____
Charlotte Harsimant Poulsen

Dated: 10.01.2003 By: Masoud R. Zargahi
Masoud R. Zargahi

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674509-2028APPENDIX: CLAIMS

44. (Amended) A process for preparing a foodstuff suitable for consumption comprising an emulsifier, the process consisting essentially of the steps of
- (i) contacting a food material containing a fatty acid ester and a second constituent comprising a hydroxy group with an enzyme having esterase activity such that an emulsifier is generated by the enzyme from the fatty acid ester and a second functional ingredient is generated from the second constituent; and
- (ii) inactivating or denaturing the enzyme to provide the foodstuff comprising the emulsifier, the fatty acid ester and the enzyme in an inactive form or a denatured form.
45. (Not Amended) The process according to claim 44 wherein the fatty acid ester comprises at least two ester groups.
46. (Not Amended) The process according to claim 44 wherein the fatty acid ester is a triglyceride.
47. (Amended) The process according to claim 44 wherein the enzyme having esterase activity has lipase activity, or the enzyme having esterase activity is a mixture of enzymes.
48. (Not Amended) The process according to claim 44 wherein the enzyme is isolated from a plant, an animal or a micro-organism.
49. (Not Amended) The process according to claim 48 wherein the micro-organism is selected from the group consisting of *Aspergillus niger*, *Rhizopus delemar*, *Rhizopus arrhizus*, *Mucor miehei*, *Pseudomonas sp.*, *Candida rugosa*, *Penicillium roqueforti*, *Penicillium cyclopium*, *Aspergillus tubingensis*, *Candida cylindracea*, *Thermomyces lanuginosus*, *Mucor javanicus*, *Candida antarctica*, *Chromobacterium viscosum*, *Pseudomonas fluorescens*, *Pseudomonas nitroreducans*, *Chromobacterium viscosum*, *Bacillus subtilis*, mutants and combinations thereof.
50. (Amended) A process for preparing a foodstuff suitable for consumption comprising an emulsifier, the process comprising the steps of
- (i) contacting a food material containing a fatty acid ester and a second constituent comprising a hydroxy group with an enzyme having esterase activity such that an emulsifier is generated by the enzyme from the fatty acid ester and a second functional ingredient is generated from the second constituent; and

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(ii) inactivating or denaturing the enzyme to provide the foodstuff comprising the emulsifier, the fatty acid ester and the enzyme in an inactive form or a denatured form;

wherein the second constituent is a sugar.

51. (Not Amended) The process according to claim 44 wherein the second constituent is hydrophilic.

52. (Amended) The process according to claim 44 wherein the second constituent is selected from the group consisting of, polyvalent alcohols, ethanol, sugars, dextrans, sorbitol, mannitol, fruit acids and hydroxy acids, and mixtures thereof.

53. (Not Amended) The process according to claim 44 wherein the second constituent is glycerol.

54. (Amended) The process according to claim 50 wherein the sugar selected from the group consisting of sucrose, fructose, glucose, lactose, and galactose.

55. (Amended) A process for preparing a foodstuff suitable for consumption comprising an emulsifier, the process comprising the steps of

(i) contacting a food material containing a fatty acid ester and a second constituent with an enzyme having esterase activity such that an emulsifier is generated by the enzyme from the fatty acid ester and a second functional ingredient is generated from the second constituent; and

(ii) inactivating or denaturing the enzyme to provide the foodstuff comprising the emulsifier, the fatty acid ester and the enzyme in an inactive form or a denatured form;

wherein the second constituent is maltodextrin.

56. (Amended) A process for preparing a foodstuff suitable for consumption comprising an emulsifier, the process comprising the steps of

(i) contacting a food material containing a fatty acid ester and a second constituent comprising a hydroxy group with an enzyme having esterase activity such that an emulsifier is generated by the enzyme from the fatty acid ester and a second functional ingredient is generated from the second constituent; and

(ii) inactivating or denaturing the enzyme to provide the foodstuff comprising the emulsifier, the fatty acid ester and the enzyme in an inactive form or a denatured form;

wherein the second constituent is a hydroxy acid selected from the group consisting of citric acid, tartaric acid, lactic acid and ascorbic acid.

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57. (Amended) A process for preparing a foodstuff suitable for consumption comprising an emulsifier, the process comprising the steps of

(i) contacting a food material containing a fatty acid ester and a second constituent comprising a hydroxy group with an enzyme having esterase activity such that an emulsifier is generated by the enzyme from the fatty acid ester and a second functional ingredient is generated from the second constituent; and

(ii) inactivating or denaturing the enzyme to provide the foodstuff comprising the emulsifier, the fatty acid ester and the enzyme in an inactive form or a denatured form;

wherein the second constituent is an alcohol.

58. (Amended) A process for preparing a foodstuff suitable for consumption comprising an emulsifier, the process comprising the steps of

(i) contacting a food material containing a fatty acid ester and a second constituent comprising a hydroxy group with an enzyme having esterase activity such that an emulsifier is generated by the enzyme from the fatty acid ester and a second functional ingredient is generated from the second constituent; and

(ii) inactivating or denaturing the enzyme to provide the foodstuff comprising the emulsifier, the fatty acid ester and the enzyme in an inactive form or a denatured form;

wherein the second constituent is ascorbic acid, or a protein hydrolysate.

59. (Amended) A process for preparing a foodstuff suitable for consumption comprising an emulsifier, the process comprising the steps of

(i) contacting a food material containing a fatty acid ester and a second constituent comprising a hydroxy group with an enzyme having esterase activity such that an emulsifier is generated by the enzyme from the fatty acid ester and a second functional ingredient is generated from the second constituent; and

(ii) inactivating or denaturing the enzyme to provide the foodstuff comprising the emulsifier, the fatty acid ester and the enzyme in an inactive form or a denatured form;

wherein the second constituent is selected from the group consisting of proteins, amino acids, peptides, and mixtures thereof.

60. (Amended) The process according to any one of claims 44, 50 or 54-59 wherein the foodstuff is selected from the group consisting of baked goods, confectionery, frozen products, dairy products, meat products, edible oils and fats, and fine foods.

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61. (Not Amended) The process according to claim 60 wherein the foodstuff is a baked good selected from the group consisting of breads, cakes, muffins, doughnuts, biscuits, crackers and cookies.

62. (Not Amended) The process according to claim 60 wherein the foodstuff is a confectionery selected from the group consisting of candies, caramels, chocolate and puddings.

63. (Not Amended) The process according to claim 60 wherein the foodstuff is a frozen dairy product.

64. (Amended) The process according to claim 63 wherein the frozen dairy product is selected from the group consisting of ice cream and ice milk.

65. (Amended) The process according to claim 60 wherein the foodstuff is a dairy product selected from the group consisting of coffee cream, whipped cream, custard cream, milk drinks and yoghurts.

66. (Amended) The process according to claim 60 wherein the foodstuff is a processed meat product or a spread.

67. (Amended) The process according to claim 60 wherein the foodstuff is an edible oil or fat selected from the group consisting of water in oil emulsions, oil in water emulsions, margarine, and shortening.

68. (Amended) The process according to claim 60 wherein the foodstuff is a fine food selected from the group consisting of sauces and mayonnaise.

69. (Amended) A foodstuff obtained by a process as defined in claim 44, 50 or 54-59.